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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------|-------------|----------------------|---------------------|------------------|
| 10/647,568 | 08/25/2003 | Alexis C. Weber | DP-310020 | 3258 |
| 22851 | 7590 | 03/24/2005 | EXAMINER | |
| DELPHI TECHNOLOGIES, INC. | | | NGUYEN, TUAN N | |
| M/C 480-410-202 | | | ART UNIT | |
| PO BOX 5052 | | | PAPER NUMBER | |
| TROY, MI 48007 | | | 3751 | |

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/647,568 | WEBER ET AL. | |
| | Examiner | Art Unit | |
| | Tuan N. Nguyen | 3751 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 18-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 18-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/5/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

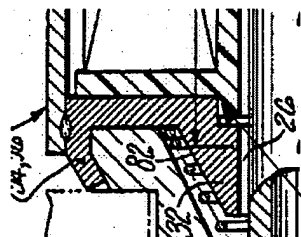
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-8 and 18-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Perach.

In regard to claim 1, Perach discloses a tubeless actuator comprising a frame (40), a primary plate (42,44) disposed within the frame; a secondary plate (34,36) disposed within the frame opposite the primary plate; and a bobbin (38) disposed within the frame between the primary plate and the secondary plate; and wherein the bobbin is keyed to the secondary plate to maintain alignment between the bobbin and the secondary plate (see picture below).



bobbin is keyed to secondary plate

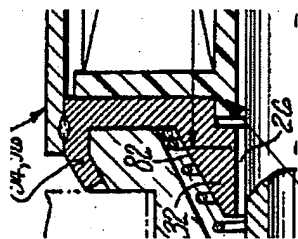
In regard to claims 2 and 18, the tubeless actuator further comprises a plunger (72) slidably disposed within the bobbin; and wherein the plunger slides in direct contact with the bobbin.

In regard to claims 3 and 19, the tubeless actuator inherently comprises or appears to include a secondary air gap (see Fig. 1) established between an inner wall established by the secondary plate and an outer wall established by the plunger (72)

In regard to claims 4 and 20, the plunger defines a distal end and the actuator further comprises an annular notch (about 78) established around an outer periphery of the distal end of the plunger.

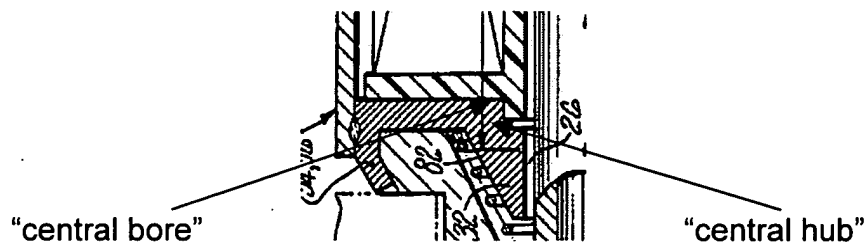
In regard to claims 5 and 21, the tubeless actuator further comprises a frusto-conical spring (76) disposed around the distal end of the plunger, and wherein the frusto-conical spring engages the annular notch.

In regard to claims 6 and 22, the tubeless actuator further comprises an annular rib extending from the bobbin, an annular groove established by the secondary plate, and wherein the annular rib engages the annular groove to maintain alignment between the secondary plate and the bobbin (see picture below).

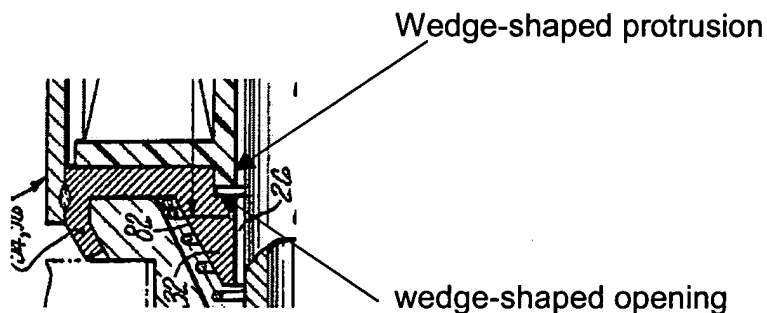


annular rib engages the annular groove

In regard to claims 7 and 23, the tubeless actuator further comprises a "central bore" established by the bobbin; a "central hub" extending from the secondary plate; and wherein the "central hub" engages the "central bore" to maintain alignment between the secondary plate and the bobbin (see picture below).



In regard to claims 8 and 24, the tubeless actuator further comprises at least one wedge-shaped protrusion extending from the bobbin; at least one wedge-shaped opening established by the secondary plate; and wherein the wedge-shaped protrusion engages the wedge-shaped opening to maintain alignment between the secondary plate and the bobbin (see picture below).




Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Balsdon, Shost, Perry et al., Everingham et al., Busato et al., Cook et al., and Yamamuro discloses other tubeless actuator.
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan N. Nguyen whose telephone number is 571-272-4892. The examiner can normally be reached on Monday-Friday (10:00-6:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine R. Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Tuan Nguyen
Primary Examiner
Art Unit 3751

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